We claim:

1. A scanner for a medical optical imaging device, comprising:

a) an illumination source positioned to direct emitted light into a breast positioned below a support surface;

b) a plurality of detectors positioned to detect light emerging from the breast; and

c) a container disposed below said illumination source and said detectors adapted to trap light reflected from the breast.

2. A scanner as in claim 1, wherein said container is cylindrical.

3. A scanner as in claim 1, wherein:

a) said container includes an inside vertical wall surface; and

b) said inside vertical wall surface includes angular steps.

4. A scanner as in claim 3, wherein said angular steps each includes a horizontal surface and an angular surface directed upwardly.

5. A scanner as in claim 3, wherein said vertical wall surface is coated with low reflectivity material.

6. A scanner as in claim 5, wherein said low reflectivity material is flat black paint.

7. A scanner as in claim 1, wherein said container includes an inside bottom surface.

8. A scanner as in claim 7, wherein said inside bottom surface includes vertically directed honeycomb structure with openings directed upwardly.

9. A scanner as in claim 8, wherein said openings are hexagonal.

10. A scanner as in claim 7, wherein said inside bottom surface is coated with low-reflectivity material.

11. A scanner as in claim 10, wherein said material is flat black paint.

12. A scanner as in claim 1, and further comprising a side curtain disposed around the breast to exclude ambient light from the breast.

13. A scanner as in claim 12, wherein said side curtain is foldable vertically.

14. A scanner as in claim 1, and further comprising:

a) a collimator to be disposed around the breast; and

b) said collimator including a slanted vertical surface facing the breast.

15. A scanner as in claim 14, wherein said slanted vertical surface is disposed toward said container at about 15° from a vertical reference line.

16. A scanner as in claim 14, wherein:

a) said collimator includes a plurality of openings; and

b) said openings include inside surfaces with grooves with slanted walls.

17. A scanner as in claim 16, wherein said grooves are made with screw threads.

18. A scanner for a medical optical imaging device, comprising:

a) an illumination source positioned to direct emitted light into a breast positioned below a support surface;

b) a plurality of detectors positioned to detect light emerging from the breast; and

c) a collimator having a plurality of holes associated with respective said plurality of detectors to restrict the field of view of said detectors, said holes including non-smooth inside surfaces.

19. A scanner as in claim 18, wherein said inside surfaces include grooves with slanted walls.

20. A scanner as in claim 18, wherein said inside surfaces are provided with screw threads.

21. A scanner as in claim 18, wherein said collimator includes a slanted vertical surface facing the breast.

22. A scanner as in claim 21, wherein said slanted vertical surface is disposed toward said container at about 15° from a vertical reference line.

23. A scanner for a medical optical imaging device, comprising:

a) a scanning chamber including an illumination source

positioned to direct emitted light into a breast and a plurality of detectors positioned to detect light emerging from the breast; and

b) said scanning chamber including inside surfaces coated with low-reflectivity material.

24. A scanner as in claim 23, wherein said material is flat black paint.

25. A scanner for a medical optical imaging device, comprising:

a) a scanning chamber including an illumination source positioned to direct emitted light into a breast and a plurality of detectors positioned to detect light emerging from the breast; and

b) said scanning chamber including slanted vertical surfaces to direct light from a horizontal plane.

26. A scanner as in claim 25, wherein:

a) said chamber includes a container disposed below said illumination source and said detectors;

b) said container includes an inside vertical wall surface; and

c) said inside vertical wall surface includes angular steps.

27. A scanner as in claim 26, wherein said angular steps each includes a horizontal surface and an angular surface directed upwardly.

28. A scanner as in claim 26, wherein said container is cylindrical.

29. A scanner as in claim 25, wherein said chamber includes a side curtain disposed around the breast to exclude ambient light from the breast.

30. A scanner as in claim 29, wherein said side curtain is foldable vertically with slanted vertical surfaces.

31. A scanner for a medical optical imaging device, comprising:

a) an illumination source positioned to direct emitted light into a breast positioned below a support surface;

b) a plurality of detectors positioned to detect light emerging from the breast; and

c) a collimator having a plurality of holes associated with respective said plurality of detectors to restrict the field of view of said detectors, said holes including non-smooth inside surfaces.

32. A scanner as in claim 31, wherein said inside surfaces include grooves with slanted walls.

33. A scanner as in claim 31, wherein said inside surfaces are provided with screw threads.

34. A scanner as in claim 31, wherein said collimator includes a slanted vertical surface facing the breast.

35. A scanner as in claim 34, wherein said slanted vertical surface is disposed toward said container at about 15° from a vertical reference line.